

6869770

UVMO:003US
 U.S. Serial No. 09/273,164
 "Compositions and Methods for Early Pregnancy Diagnosis"
 Inventors: Roberts et al.
 Replacement Sheet



Consensus	MKWLVLLGLV	AESECIVKIP	LR..KTMR.T	LS.KN.LNNF	LKE.AYRLSQ	IS.RGSNLT-	▼ (1)	60 (2)
b0PAG 8	.....	.....L.....	.TKM...QEA	IRE.QL.ED.	..D.QPHS...	H.DPKKFS.	59	
b0PAG 2	.....	.....IL..KKM..L.E.	.RE..L....	..E.Q....K	N---D.KI..	56		
b0PAG12	.....	.....IL..KM..L.E.	.RE..L....	..E.R....K	K---D.KI..	56		
b0PAG11	.....F...	.....IML..TKT..EI	WRE.KL..S.	..E.Q.N.M.D	D.ASDPK.S.	59		
b0PAG 9	....I.....	....QV...K..	..G..M.K..	..HP....	..F....	59		
b0PAG10	....6.....	....L..M.I..QM..E.	.RERHL.T..SE.HP.N...	KAANDQ.IIY	60			
b0PAG 4	.....	....RV..TK..	..G..M....	V..H....	..F....	59		
b0PAG 6	.....	....RV...NA	I.G..T..I	..H...P..	..F....	59		
b0PAG 1	.....	....RL...NW	V.G..M....	..H...S....	..F....	59		
b0PAG 3	....DD.....	....RV...N	V.G..I..I	..HV....	..F....	59		
b0PAG 5	....L.....TS.....IL..	..TKV...K..	..E..M....	..Q....	..S....I..	59		
b0PAG 7	.....	....RV...K..	..6..M....	..DP...H..	..F....	59		
Consensus ~	.HPLRN1.D..YYGNITIGT	PPQEFQWVFD	TGSSDIWVPS	I.C.S.AC.T	H.RFRH..SS	120 (62)		
b0PAG 8	S.Q.K.FQNA V.F.T	.....	.....	VD.Q.PS.SK	K..DPQK.T	119		
b0PAG 2	I.....YL.T A.....	.....R.....	.....AN....C	T.T.P.Y.	KT.NPQN..	116		
b0PAG12	I...K.YL.M A.....	.....R.....	.....A	.S.V.P.Y.	KT.NLHN..	116		
b0PAG11	I....AL.M A.....	.....K.R.....	.....	.K.I.P.H.	IT.D.HK..	119		
b0PAG 9	I.....MNL V.....	.....	.....	FCTM-P..SA	PW..QLQ..	118		
b0PAG10	H...SYK.F S.I..N	.....L..	.....S	.Y.Q.SS.YK	NS.VPCN..	120		
b0PAG 4	I.....R.F ?.....	.....I..	.....E	.F.N.ST.SK	D....LE..	119		
b0PAG 6	.....R.L F.....	.....I..	.....A	.F.N.SS-AA	V....HQ..	118		
b0PAG 1	I.....K.L V.M..	.....	.....A	DF.T.P.S.	V....LQ..	119		
b0PAG 3	I.....K.L I.....F	DF.T.R..S.	V....LQ..	119		
b0PAG 5	I.....M.M V...K	E.....	VF.P.S..S.	1....LE..	119	
b0PAG 7	I.....R.I F.....	I.....	D.N.TS.A..	V....LQ..	119	

FIG. 1A



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	TFR.TNKTF.	I.YGSG.MKG	L..DTVRIG	.LVSTDQPF6	LS.EE-.GF.DGVLG	180 (120)
Consensus	bOPAG 8 bOPAG 2 bOPAG12 bOPAG11 bOPAG 9 bOPAG10 bOPAG 4 bOPAG 6 bOPAG 1 bOPAG 3 bOPAG 5 bOPAG 7	..QPL.QKIE S..EVGSPIT S.GQ.HQPIS ..L.RRP.H ..QP...T .KA...I.N ..LSRR..S ...P.....R ...L.....R ...L.....R .SGL.Q...S ...P.....R	LV...T... F...IIQ. .S..P.IIQ. L...M.N. T...S... TN.TATSI.. .T...RIEA T...R... .T...R... .T...R... .T...ST.. .I...R.N.	V.GS..IQ.. F.GS..... F.GS..... V.AY..... F.AY..... Y.VY..... LVVH..... VVH..... VVH..... VAH..... F.AY..... VIAY.....	N..IVN.I... N...PE.S... N...LK.S... K..... D..... N...VA... D....Q... D..... N..... D..... D.L...E... D.....	..QNQSS.VL ..L...Y.D ..Q...Y.D ..LQQ.F.D ..W...Y.LE ..LK...F.D .CL...S.E .CLKD.S.K ..I...Y.E ..V...Y.E .M...H.E .V...Y.A	EQVPY...I.. SLP.F..I.. GAP.F..... NAP.F..... GRN.Y..... DVP.F..I.. GMR.F..... GIP.F..I.. GRI.Y..... GRAY.Y..... DLPF..... HKRF--.I.. 179 174 174 177 176 178 177 176 177 178 177 177
Consensus	L.YP..S..G	AIPIDNLKN	QGAISEPVFA	FLYS...EG	SVVMFFGVDH	YYKGELNW.	240 (180)
bOPAG 8 bOPAG 2 bOPAG12 bOPAG11 bOPAG 9 bOPAG10 bOPAG 4 bOPAG 6 bOPAG 1 bOPAG 3 bOPAG 5 bOPAG 7	.A..SLAIQ. .AF.AMGIED .A..SI.IK. .S..SLAVP. .N..NI.FS. .G..RRIT. .S..TNI.PS. .S..NKTFS. .N..NI.FS. .N..DM.FIT .N..WNL.WSK	TT.V..... T.....WS I.....WS T.....K.QI. N.....WKVYK... F.....K...K... T..... N..NI.FS.K... R..... T..... M.....K...	REV..... H..F..... F..... TRKEN. L.L..... KNKQ.. SQKEN.. KDER.. KDKQ.. KDER.. IL..KDEQ..F... GKVK--, E.....	SRPENI NTNKP.. NTCQP..I. TRKEN. L.L..... KNKQ..NRA...A... KDER.. KDKQ.. KDER.. IL..KDEQ..F... GKVK--, E.....	T..... R..... R..... S.H..K... Q..... A.....V R..... R..... R..... R..... R..... R..... R..... R..... R.....	T.H..K.Q.I R..... R..... R..... S.H..K... Q..... A.....V R..... R..... R..... R..... R..... R..... R..... R..... R.....	239 234 234 237 236 238 237 236 237 238 237 236 237 236 235 213

FIG. 1B



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Consensus	P., Q.G.W..	.MDRISM.R.	VIACS.GC.A	LVDTGT\$.I.	GP.RLV.NI.	KLI.A.P.-G	300 (239)
b0PAG 8	.VT.ARF.QV	A.SSMT.NGN	.VG..Q..Q.	V.....LLV	.TH..TD..L	...NPN.IJN	299
b0PAG 2	.VS.TSH.QI	S.NN...NGT	.T..C..E.	.L.....M.Y	.TK..T..H	..MN.RL.EN	293
b0PAG12	.VS.TRY.QI	S.N...NGN	.T..R..Q.	.L.....M.H	.T..IT..H	..MN.RH.Q.	293
b0PAG11	.VS.TKS.LI	TV.....NGR	.G.EH..E.	.L..H	.A.P.T..Q	.F.H.M..Y.	296
b0PAG 9	.LIEA.E.RV	H.....K.T	.....D..E.	.H.....H.E	.G..N..H	R..RTR..FD	295
b0PAG10	.VS.V.S.HI	NI.S...NGT	.V..KR..Q..	SWIR.-RLSA	W.K.I.SK.Q	...H.R..ID	296
b0PAG 4	.LMKA.D.SV	H.....K.K	.....G..K.	S.D.V	..ST..N..W	..G.T..Q.	296
b0PAG 6	.LI.V.D.FV	H....TT.K.K	.....D..K.	D.V	..ST..N..W	..R.R..L.	295
b0PAG 1	.LI.A.D.SV	H.....IE.K	.....D..K.	D.V	..R..N..H	R..G.I..R.	296
b0PAG 3	.LIEA.D.II	H.....K.K	I.....GS.E	I.....A.E	.RK..NK.H	..G.R..RH	297
b0PAG 5	.LI.A.E.SL	H.....K.K	.....G..E	FY.....L.L	..R..N..Q	..G.T..Q.	294
b0PAG 7	-----	-----	.....E..A..	.....S.N.Q	..G..ID..Q	RI.G.T..R.	257
Consensus	SE..VSC.AV	..LPSIIIFTI	NGI.YPVP..	AYI.KDSRG.	C...F.....	----.-S..ET	360 (295)
b0PAG 8	D.QML..D.I	NS..TLLL..	....V.....PD	Y..QRF.ERI	.FIS.QGGTE	ILKNLGT\$..	359
b0PAG 2	..YV...D..	KT..PV..N.	....D..LRPQ	...I.IQN-S	.RSV.QGGTE	...N..SLN.	348
b0PAG12	..YV...D..	KT..PV..N.	....D..L.PQ	...T.AQN-F	.LSI.HGGTE	...T..SP..	348
b0PAG11	..YM.L.PVI	SI..PV....	....D.S..RE	...Q.I.NSL	.LST.HGD-D	...T..--DQ	348
b0PAG 9	.KHY...F.T	KY...T.I.	....K..MTAR	....F.....R	.YSA.KENTV	...R.TSR..	351
b0PAG10	R.HV...Q.I	GT..PAV...	....D..AQ	QSL.G-Y	.FSN.LVRPQ	RVNES..	352
b0PAG 4	..HY...S..	NS.....	....N..R.GQ	....L.....R	.FTA.KGHQQ	...S..ST.M	352
b0PAG 6	PGYF...S..	NT.....	....N..RL.AR	....H.....R	.YTA.KEHRF	...S..PI..	351
b0PAG 1	.HY.P.SE	NT.....V...	....N.....GR	....L..D..R	.YTT.QENRV	...S..ST..	352
b0PAG 3	.KYI..S..	NT.....	....N..C.GR	....V.L.....R	.YSM.QENKV	...S..ST..	353
b0PAG 5	.HYI..F..	IS.....NI...ARH.....H	.YPT.KENTV	...ST..-T..	350
b0PAG 7	.KYI...S..	NI.....VN...PRL.....H	.YTT.KEKRV	...RR..-T.S	313

FIG. 1C



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Consensus	WILGDVFLRL	YFSVFDRGND	RIGLA.AV
bOPAG 8	Y.....N.....P.A	387
bOPAG 2I...QK.R.....P..	376
bOPAG12	....6...Q	....R..S...-Q.	375
bOPAG11	.....	Y.....N.....P..	376
bOPAG 9	....A...R	.....R..	379
bOPAG10	.....	.....N.....P..	380
bOPAG 4	.....	RK.....TK..	380
bOPAG 6	.L.....RR..	379
bOPAG 1	.Y.....R..	380
bOPAG 3VR..	381
bOPAG 5QV-	377
bOPAG 7	.V..E.....RR..	341

FIG. 1D



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Replacement Sheet

↓ (1)
Consensus MKWLV.LGLV AFSECIVKIP LRRVKTMRKLT SGKNMLNNF LKEHPYRLSQ ISFR.SNLTI 60 (3)

OVPAG 4	.....	.....	F..	.....	.....	DV	.....	P.	.....	G...I.	60
OVPAG 7	.....	.....	F.V.	....L.....	.....	N.....V	....Y	P.	.....	D..V..	60
OVPAG 3	.....	F...	....V.	....L.....	.....	N.I....V	....Y	P.	.....	D..V..	60
OVPAG 6	.....	SI.....	.....	.....	E.....	....A.....	.....	.....	G.....	.....	60
OVPAG 1	.....	.....	.....	N.	....K.....S.	....A.....	.....	A.....	.....	A.....	60
OVPAG 5	.....	SV...	RV...	E...	MK.NV.QE.	NE.SL...	KY	....A.	N.T.N.KMAF	60	
OVPAG 9	.....	.....	.....	M.	....N.P.....M.	....A.....	.....	.....	GL....-	59	
OVPAG 2	.....	W...	L...	IM.	TKT....EI	RE..L...	.....	E.QAN.M.D.D	ASDPK.ST	60	
OVPAG 8	.....	A..	....I...	.....	SN..A.....	....K.....	.....	.....	G....T	60	

Consensus	HPLRN..D..	YVGNITIGTP	PQEFOVVFDT	GSSDLWPS.	FC.S.T---C	S.H.RFRH.Q	120 (60)				
OVPAG 4	.....	IR.TF	.....	.....	V	....V	L.N.S.....	.....	I.V.....L.	117	
OVPAG 7	.....	MK.IF	.....	P.....S	T	....I	WN.S.....	.....	TLV..K.R.	117	
OVPAG 3	.....	MK.IF	.....	.....	A.....I	....I	N.S.....	.....	TRV....R.	117	
OVPAG 6	.....	TK.LV	.....	.....	S.....	....D	....AIEA....	.....	L.T....L.	117	
OVPAG 1	.....	IM.ML	.....	.....	.....	L..I	N.L.P.KRP.	.....	KQDK.K.H.	120	
OVPAG 5	V.M..FL.LA	..P.M...RG	GEQR	.....	.....	N	....T.PA....	.....	YS.IT.KYWE	117	
OVPAG 9S.YI.MLT.....K.....	NT.PA....	TQA...YR.	116	
OVPAG 2AL.MAV.....K.R.	I	K.I.PA....	YT.IT.D.HK	117	
OVPAG 8M.IW.LLL.....R	L	L.N.S.....	AK.VM..RL	117	

FIG. 2A



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Consensus	SSTFR.TNKT	F.I.YG.G.M.	KGVWAHDTR	IGDLVSTDQP	FGLS..E.GF	...PFDGVLG	180 (120)
OVPAG 4	.....T....	W.T..A.T.	.....	.....I..	.....MA.Y..	HGRR.....	177
OVPAG 7	.....T....	W.T..A.T.	.....	.....I..	.....MA.Y..	MDRR...I..	177
OVPAG 3	...LA...	G.M..A.K.	.....Y.....	.....	VV.S.	EHRQ.....	177
OVPAG 6	...P.R.	S.T..C.TV	.....V.....	.....	TA.HVS	RCT.....	177
OVPAG 1	...F.D.	R.YF.S.T.	R.F.....	.....	IFL.SWL	D-I.....I..	179
OVPAG 5	...Y.H.T.P	E.A..S.RI	..HL.Y..IQ	N.....	...LV.Y..	NGL.....I..	177
OVPAG 9	...L..R.	C.T..S.6L	...I.....	N.....	...TLK.Y..	ENI.....	176
OVPAG 2	...L.RRP	R.L..S.M.	N..L.Y.....	N.....	LQQF..	DNA.....	177
OVPAG 8	...Y.L....	M.F.RV.KI	E...VR....	.....A.T	...IA.T..	ENTL..I..	177
Consensus	LNYP..S..6	.IPIFDKLKN	EGA1SEPVFA	FYLSD.QEG	SVVMFFGVDH	.YYKGELNWV	240 (180)
OVPAG 4	...RQ.CCR	PT.....	Q.....	.....E..	.....	R.....	237
OVPAG 7	...RQ.CSK	TKW.....S	Q.....	.....E..	.....	T.....SL	237
OVPAG 3	...NL.FSK	T.....	.....	.....E..	.....	S.....K.....	237
OVPAG 6	...SI.FWS	T.....	.....	.....G..	.....	R.....	237
OVPAG 1	...KI.FS.	A.....	F.....	N..K.....	.....	R.....	239
OVPAG 5	...N..IL.	A.....N..K	Q.....I..	GTVN..	..L.L.....K	A.....I	236
OVPAG 9	...NI.FS.	AV.....	L.....	F...E..	R..E.....	236
OVPAG 2	...S..SLAVP.	T.....Q	Q.....I..	TNKEN..	..L.L.....	S.H..K..I	237
OVPAG 8	...S..NT.CF.	A.....	N-----	-----	-----	212

FIG. 2B



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Consensus	PL..AGDW.I	.VDRISM.R.	VIACS.GC.A	VDTG.S.I.	GP.RLVDNQ	KLIGA.P.G.	300 (240)
OVPAG 4	..VK.D..T.	Q.....R.ED..D.	L...A.F.H	..G..I.D..SE.RDL	297
OVPAG 7	..VK.D..S.	H.....R.E	....D..D.	L...A.F.H	..G..I.D..	....SEGQDF	297
OVPAG 3	..IK...SV	R..S.T.K.E	..,D..R.	S.H.Q	..G..I.V.	....TM.Q.S	297
OVPAG 6	..IP..N.MV	HM...YIE.N	....A..K.	V...AAF.E	..KSQ...M.	.F...R.R.S	297
OVPAG 1	..IHP.E.S.	PL.....R.K	....G..E.	G..T..L	..RTV.E...	.H...TQQCF	299
OVPAG 5	..IRV...R.	R..H...KGK	L.G..G..E.	P..N	..T..T...	R...M.L.P	296
OVPAG 9	..TK...IV	RL...IG.K	....GD.E.	V...TAF.G	..RK..KK..	....RRR.N	296
OVPAG 2	.VSQTKS.L.	T.....NGK	..6.EH..E.	T..L.H	..AGP.T...	.F.H.V.YDS	297
OVPAG 8	-----	TMK,---E	....D..R.	S..I.Q	..6.....V.	.H..TM.Q.S	258

Consensus	KHYVSCSAVN	TPSIIIFTIN	GINYPVPAQA	YILK.S.G.C	YT.F...RVR	.STE.WVLGD	360 (300)
OVPAG 4	...I.....	.....	.....	....G.T.H.	..A.RAK...	T...S.....	357
OVPAG 7	...I.....	.....	.....	....G.T.H.	..A.RAK...	T...S.....	357
OVPAG 3	M...P.....	.....	.....	....GFT.H.	..A.RAK...	T...S.....	357
OVPAG 6	Y..P..V..	.....R..	S...GR.	....NHR.R.	..T.KENGWS	P..I.I...	357
OVPAG 1	EYF.....Y	A.....V..	....P..	..LV.D.R.Q.	.SP.QVN.AN	P.A.N.I...	359
OVPAG 5	.....TI..	I.....	....TL..	....T.Q.G.	F.T.KGA..F	KHR.T...	356
OVPAG 9	-----	-----	-----	----DDA.R.	S.T.QEN...	L...S.L..N	323
OVPAG 2	EYM...PVIS	I..PV.....	S.D.S...E.	..Q.I.NSL.	LSS.HGDN--	--.DK.I...	353
OVPAG 8	M...P.....GR.DFR.R.	..N.KKKIA.	TF..Y...E	318

FIG. 2C



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383 (323)

Consensus	VFLRLYFSVF	DRGNDRIGLA PAV
OVPAG 4M
OVPAG 7M
OVPAG 3	R.G
OVPAG 6	R..
OVPAG 1	R.....	R..
OVPAG 5	I.....Y	EHN..A.. Q.R
OVPAG 9	V.L..	....
OVPAG 2	Y	N.....
OVPAG 8	P.....	....

FIG. 2D

boPAG	2	4	5	6	7	8	9	10	11	12
Hybrid (d25)	4	1	1	1	5	1	1	1	1	
Immuno (d25)		19								
RT-PCR (d19)	9			11	3			3	6	

FIG. 3



BoPAG:	1	2	3	4	5	6	7	8	9	10	11	12
1	100											
2	73	100										
3	57	100										
4	91	74	100									
5	86	58	100									
6	88	73	87	100								
7	76	55	73	100								
8	86	60	86	85	100							
9	75	61	74	76	100							
10	89	73	88	89	84	100						
11	80	57	78	76	70	100						
12	87	73	87	86	85	89	100					
13	79	56	78	71	72	77	100					
14	68	68	67	67	70	69	71	100				
15	53	55	51	49	54	53	53	100				
16	87	74	88	85	85	87	86	68	100			
17	77	59	78	68	74	74	71	53	100			
18	70	72	69	68	71	70	68	71	69	100		
19	56	50	55	53	58	57	53	55	57	100		
20	74	77	73	73	76	73	75	72	73	72	100	
21	59	62	58	56	62	59	59	56	57	57	100	
22	75	90	75	74	77	75	74	70	75	73	79	100
23	61	83	60	58	63	59	58	56	60	60	64	100

FIG. 4

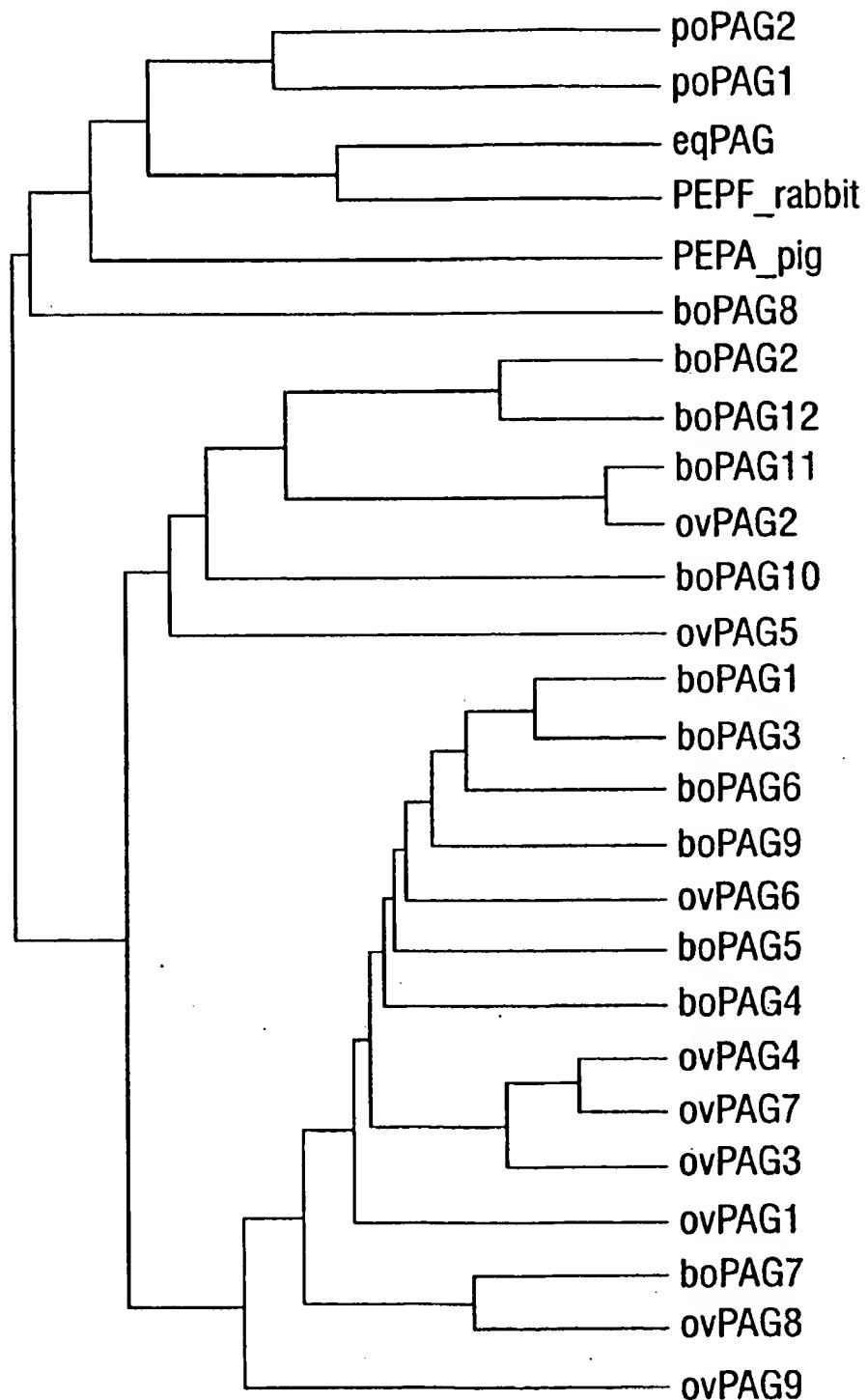


FIG. 5



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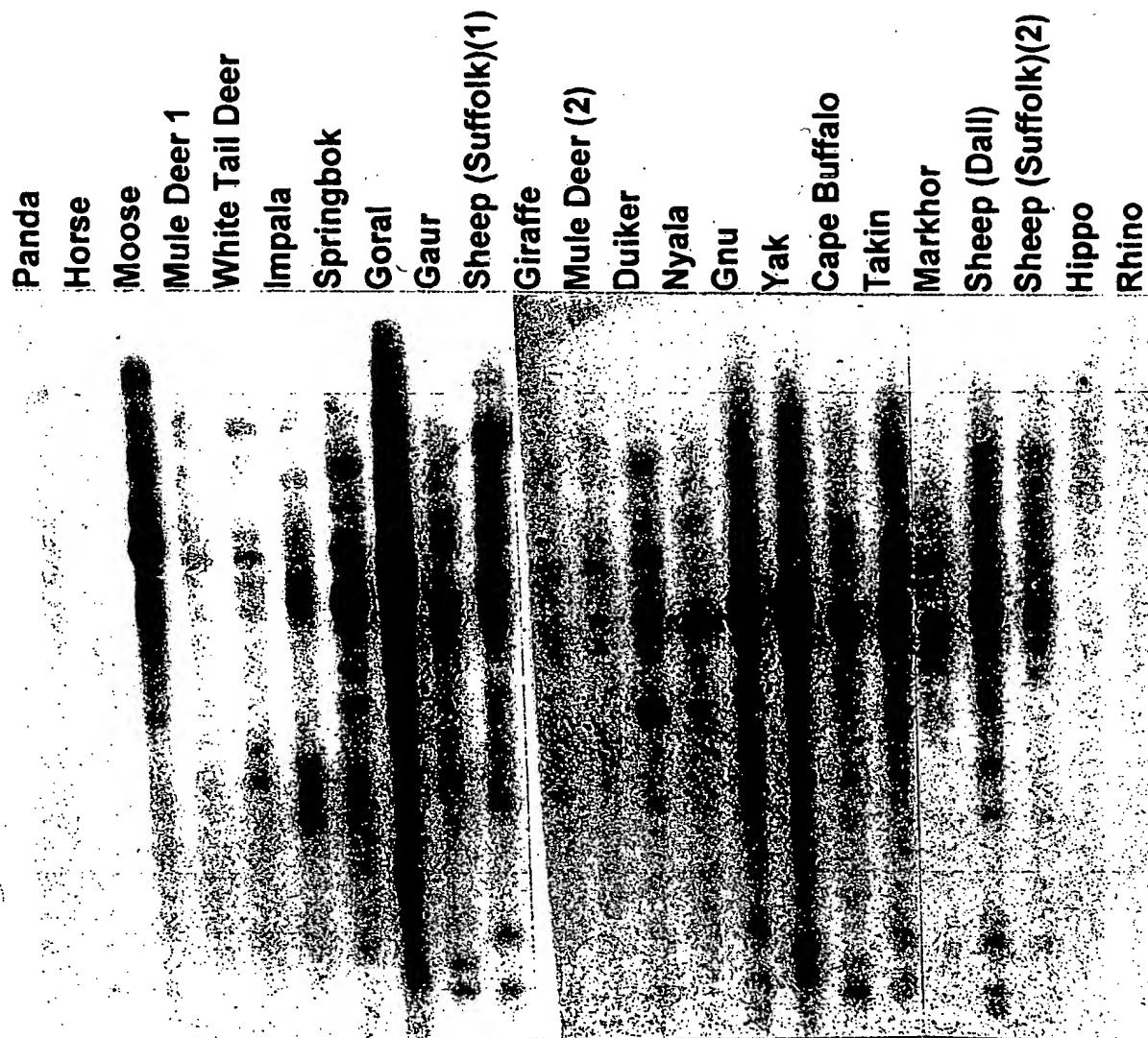


FIG. 6